

Interaction of the 2-monoanil of 1,3-diphenyl-1,2-3-propanetrione with trimethyl phosphite and tris(dimethylamino)phosphine

Polezhaeva N., Agafonov M., Arbuzov B.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

1. Trimethyl phosphite reacts with the 2-monoanil of 1,3-diphenyl-1,2,3-propanetrione under mild conditions to form 2,2,2-trimethoxy-3,5-diphenyl-4-benzoyl-1,3,2-oxazaphospholene (II). 2. Hydrolysis of (II) gives N-dibenzoylmethyl N-phenyl OO-dimethyl amidophosphate (IV). We have examined its keto-anol tautomerism. 3. Compound (IV) is also formed by reaction of (I) with trimethyl phosphite in the presence of acetic acid. 4. Tris(dimethylamino)phosphine reacts with the 2-monoanil of 1,3-diphenyl-1,2,3-propanetrione to form a dipolar 1:1 adduct (III) with a P-N bond. © 1979 Plenum Publishing Corporation.

<http://dx.doi.org/10.1007/BF00924833>
